RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

June 6, 2016

455-19
MR. DON JOHNSON
EPA REGION 6
6MD
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

Re: Quality Management Plan
Underground Injection Control Program

Dear Mr. Johnson,

Enclosed are an updated Quality Management Plan (QMP) for our UIC program and updated organization charts. The QMP has been revised to ensure the most current information is available to the EPA.

I request that upon Region 6 approval, copies of the signature pages be mailed so that they may be included with the plans on file.

Sincerely,

Lori Wrotenbery

Lori Wrotenbery
Director
Oil & Gas Division

LW/jbj

Enclosures: Quality Management Plan
Organization Charts

QUALITY MANAGEMENT PLAN

Railroad Commission of Texas
Oil and Gas Division
Underground Injection Control Program

Revision Date: June 6, 2016

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1. QUALITY MANAGEMENT AND ORGANIZATION

Mission Statement:

The mission of the Railroad Commission of Texas (RRC) is to serve Texas by our stewardship of natural resources and the environment, our concern for personal and community safety, and our support of enhanced development and economic vitality for the benefit of Texans.

Policy on Quality Assurance:

The policy of the RRC is to ensure that all scientific data generated by or for the agency will be scientifically valid, legally defensible, and have acceptable and verifiable precision and accuracy. It is a goal of the RRC that:

- the data be scientifically valid and of known quality in terms of precision, accuracy, representativeness, completeness, and comparability;
- the intended use of the data be determined before the data is collected to ensure the necessary level of quality is attained; and
- the data be of such a quality that it is scientifically and legally defensible.

Organizational Structure and Responsibilities:

The RRC oversees a broad range of activities that include the vital areas of energy, environmental protection, and public safety. Under the management of three elected commissioners, regulation is carried out by three regulatory divisions: Oil and Gas, Oversight & Safety, and Surface Mining and Reclamation.

The Oil and Gas Division, the largest of the divisions, has been given these responsibilities by law:

- to prevent waste of oil, gas, and geothermal resources;
- to protect fresh water from pollution that might result from oil and gas operations;
- to collect resource data;
- to provide for equitable production among operators; and
- to ensure the safety of the public.

The Oil and Gas Division is headed by Lori Wrotenbery, Director of Oil and Gas.

The Oil and Gas Division administers the Underground Injection Control (UIC) Program to protect underground sources of drinking water from injection well operations related to oil and gas activities. Several sections of the Oil and Gas Division participate in the UIC program. Most UIC activities are carried out through Technical Permitting, which handles most of the Division's environmental permitting, and Field Operations, which coordinates the activities of the Division's nine district offices.

Other sections of the Oil and Gas Division, such as the Field Operations Section, provide support to the UIC program. In addition, several sections of other divisions assist in program activities including the, Environmental and Legal Enforcement sections of the General Counsel's office, and the Hearings Division.

The Technical Permitting Section plays the lead role in coordinating the UIC Program for the Oil and Gas Division. UIC is one of the components of the responsibilities of the Technical Permitting Section. David Hill is the UIC program manager. Mr. Hill ensures that decisions are technically sound and adheres to division policy and that the UIC work plan commitments are achieved.

UIC is composed of Injection-Storage Permits & Support.

- Permitting. This unit processes applications for permits to inject fluids into productive formations or to dispose of oil and gas wastes into non-productive formations as well as the permitting of Class III brine mining wells and Class II underground hydrocarbon storage facilities and wells.

- Support. This unit utilizes senior engineering staff to handle special problems related to well completion and operation, the mechanical integrity testing program (Form H-5)for all Class II wells, processing the annual injection/disposal well monitoring reports (Form H-10) and its subsequent permit compliance, and the UIC inventory of injection, disposal, hydrocarbon storage, and brine mining wells.

The manager of these activities is responsible for implementing the administrative and technical aspects of the UIC rules in their areas of responsibility.

Organization charts of the RRC, the Oil and Gas Division, and Technical Permitting are included as Attachments 1, 2, and 3.

UIC Quality Assurance Officer:

The UIC Quality Assurance Officer, Juanita Jimenez, performs her duties under the authority of the Oil and Gas Division Director. Under this authority and in conjunction with her responsibilities, the UIC QA Officer has direct access to the Division Director, Assistant Director for Technical Permitting, Assistant Director for Field Operations and the district directors as well as senior technical staff. In addition, the UIC QA Officer has the authority to discuss data quality, as it relates to the UIC program, with contract laboratory supervisors.

As the UIC QA Officer, Susan Moore has the following responsibilities and authorities:

- Serve as the official EPA contact person on UIC quality assurance matters.
- Prepare and maintain the UIC QA Management Plan and advise the EPA UIC program director of any revisions to the plan.
- Prepare and maintain the QA project plan(s) for the UIC program.
- Submit to EPA an annual update of the QA management plan.
- Identify any QA needs and resolve QA problems within the RRC's UIC program.
- Review EPA guidance on QA and advise the Deputy Director for the Oil and Gas Division on how the RRC should implement the guidance.

Assurance of QA Implementation:

The RRC takes a Total Quality Management (TQM) approach to daily management of the UIC Program. TQM has not been adopted in a formal manner; however, the principles of TQM are applied in order to accomplish UIC goals. The Oil and Gas Division uses team reviews of policy and procedures, multi-disciplinary reviews of problems and questions, tiered-level reviews appropriate to the scope of the problem, and in-depth evaluation of any criticism of service. A primary goal of the UIC program is to provide quality customer service.

RRC staff whose work tasks entail environmental measurements that have quality assurance project plans will be informed of the plans and trained in the aspects of the plans applicable to their tasks.

The UIC Quality Assurance Officer performs her duties under the authority of the Oil and Gas Director. Under such authority, the UIC QA Officer has direct access to the Division Director, Assistant Director for Technical Permitting, and Assistant Director for Field Operations, and the district directors. In addition, the UIC QA Officer has the authority to discuss data quality, as it relates to the UIC program, with contract laboratory supervisors.

2. QUALITY SYSTEM AND DESCRIPTION

Program Supported by Quality System:

The federal Safe Drinking Water Act of 1974 provided for the protection of underground sources of drinking water. The Act provided that a state could obtain primary enforcement responsibility by adopting a program consistent with the federal requirements. The RRC was granted primary enforcement responsibility by the EPA on April 23, 1982 for Class II injection wells, which are injection wells associated with oil and gas activities. As a primacy state, the RRC has a continuing obligation to maintain an underground injection control program that is equally effective as the federal program. In addition, 40 CFR §31.45 requires the development and implementation of quality assurance practices consisting of policies, procedures, specifications, standards, and documentation sufficient to produce data of adequate quality.

Sampling and analysis performed in support of the RRC's UIC program are subject to the Quality Assurance and Quality Management requirements. Activities of the RRC's UIC program that generate data include:

- Mechanical Integrity Tests
- Monitoring and Reporting
- Investigations, including Complaint Investigations
- Emergency Response
- Inspections of Wells and Commercial Disposal Facilities

Quality Framework:

In 1991, the Texas Legislature mandated the development of long-range strategic plans for all agencies within the executive branch of Texas state government. To guide individual state agency plans, the Governor's Office and the Legislative Budget Board in concert developed a long-range strategic planning methodology for Texas. The RRC's strategic plan was submitted prior to September 1, 1992. The plan was first revised in October 1992 and is updated biennially with the current plan covering the fiscal years 2015-2019.

The RRC's strategic plan describes its mission, philosophy, goals, objectives, and strategies. The strategic planning process is linked to daily management decisions because it guides the setting of priorities and the allocation of personnel and financial resources.

The RRC has always supported planning as one of the important principles of management. State-mandated strategic planning provides a process that requires specific steps and formats that must be incorporated into the RRC's planning. The RRC's strategic planning process involves the following steps:

- Conduct an initial strategic planning session involving the Commissioners and the regulatory division directors.
- Train RRC supervisors and managers in the process of strategic planning.
- Prepare strategic plans at the division level.
- Conduct a strategic planning work session involving the Commissioners and all division directors.
- Prepare the external/internal assessment.
- Review and complete final objectives and strategies.

All managers and supervisors are trained in the process of strategic planning. Objectives and strategies are developed for all tasks. These objectives and strategies are merged at the division level, then at the Commission level.

In accordance with the strategic plan, the Railroad Commission assesses its performance on a quarterly basis. The quarterly reviews focus on objectives and strategies. The Legislative Budget Board ultimately performs the overall assessment of the Commission's success in meeting its goals, objectives, and strategies.

At UIC program management level, this Quality Management Plan generally describes how data quality is assured. More specifically, the Quality Assurance Plan for Chemical Tests documents the controls that ensure the quality of analytical results. At the organizational management level, procedures for proper, efficient, and accurate performance of tasks are prepared. The degree of formalization of such procedures may vary based on the nature and complexity of the task, but in effect all are standard operating procedures.

At the technical/project level, in order to achieve and to maintain the desired results, involvement of all of the staff that works in the program component is necessary. The term quality review teamwork is descriptive of the process.

Quality Review Teamwork:

At the program and program component levels, a teamwork approach is taken not only to ensure that strategic objectives are attained but also to ensure that the quality of the products meets the expected standards. The products may be categorized to include:

- Permits for injection wells.
- Reviews of mechanical integrity test reports.
- Reviews of annual injection well monitoring reports.
- Reviews of proposed well construction.
- Reviews of injection well completions
- Reports of investigations.

As an example of how the teamwork approach is used, Technical Permitting established a workgroup to evaluate the processing of fluid injection and disposal well permit applications. The objective of the workgroup was to streamline the permitting process while maintaining high standards of quality. The workgroup included all management, administrative, and technical staff that was involved in the permitting process. The members volunteered to participate in subgroups in order to develop the issues and propose solutions to any identified problems in the tasks with which they were most familiar. Subgroups drafted their recommendations and reported back to the workgroup for discussion. Adopted recommendations were incorporated into a policy and procedures document. Thus, a total quality management (TQM) approach was used successfully to improve the quality of the permitting component of the UIC program.

On a less formal basis, the UIC program uses a team approach to ensure the quality of work efforts and the consistent administration of agency policy and procedure. For example, meetings regarding a particular problem or issue typically involve staff members with varied responsibilities, experience, and expertise.

An outside technical assessment of the Railroad Commission's UIC program has been performed by the Ground Water Protection Council. The Interstate Oil and Gas Compact Commission performed a more limited review of the UIC program as a part of its review of the RRC's oil and gas waste management programs. The Commission also has an internal auditor who performed a comprehensive audit of UIC permitting processes in 2013.

The EPA mid-year and end-of-year reviews of the Railroad Commission's UIC program serve as an outside technical assessment. The permit file and enforcement reviews performed by the EPA UIC manager serve as a random check that the quality of the state's efforts is in accordance with its approved program and its annual work plan.

3. PERSONNEL QUALIFICATIONS AND TRAINING

Job qualifications are set forth in the Texas State Job Classification System. State jobs are classified on the basis of education, training, and experience. The purpose of the Job Classification System is to establish consistency among state agencies and provide a structured pay scale.

Whereas formal certifications per se are not a requirement for employment, certain courses and training are considered essential to the safe and proper conduct of duties within the Oil and Gas Division, particularly for field personnel. The state requires certain professional activities to be overseen by licensed Engineers and Geo-scientists. Appropriate RRC staff are licensed and are required to take continuing education courses to comply with state law. Training in hazardous materials and hydrogen sulfide gas are provided for all RRC field personnel. Training needs and requirements are determined by division management and implemented agency-wide by the Risk Manager.

Most recently, RRC staff has been participating in the development of an inspector training program through Interstate Oil & Gas Compact Commission (IOGCC) and Ground Water Protection Council (GWPC) States First Initiative (http://www.statesfirstinitiative.org/).

To the extent possible, in-house personnel who have the training and experience to be qualified technical trainers train other personnel at the introductory level. Commonly in-house trainers attend courses offered by industry, universities, professional organizations, or other state and federal agencies and use the knowledge and materials acquired to train other personnel. The use of established train-the-trainer programs allows for complete and cost-effective training.

The effectiveness of technical and management personnel is measured by the degree of compliance with Commission policy. Retraining and refresher training frequency is determined on the basis of turnover of personnel in both technical and management positions, as well as the degree of non-compliance. In addition, the need for updating training materials and presenting training courses is dictated by changes in technology, laws, and policies.

As a part of each annual State Underground Water Source Protection Program grant agreement work plan, the RRC and the EPA negotiate commitments to specific training and development opportunities in terms of level of effort. Within the UIC program, the RRC avails itself the opportunity to participate in training offered by the EPA through seminars and workshops.

The Oil and Gas Division frequently evaluates the staffing and positions needed in its programs. In doing so, the Division uses a process, referred to as job design that assigns an employee, to the extent possible, to tasks that take the fullest possible advantage of the employee's capabilities, interests, and ambitions. The Division also encourages self-initiated professional development so employees may continue their education.

4. PROCUREMENT OF ITEMS AND SERVICES

The RRC adheres to Texas Government Code Title 10, Subtitle D, State Purchasing and General Services http://www.statutes.legis.state.tx.us/Docs/GV/pdf/GV.2156.pdf, Texas Comptroller of Public Accounts procedures, and RRC policies and procedures for procurement of equipment, supplies, and services.

The Purchasing Department in the Finance and Accounting Division has the responsibility for establishing and maintaining procedures for the purchasing function. The Purchasing Department, in conjunction with each RRC Division, is responsible for performing the actual purchasing activities. The Information Technology Services assists each division in coordinating all purchases of computer/word processing related items.

Purchases are delivered to the Oil and Gas Division and are inspected at the time of delivery. General field equipment is inspected by technical personnel who are experienced and trained in the use of the equipment.

5. QUALITY DOCUMENTATION AND RECORDS

Management System for Records:

Title 4 of the Texas Government Code, Chapter 441, sets forth the requirements for the management of public records by departments and institutions of the state. A public record is defined as a document, book, paper, photograph, electronic record, sound recording, or other material made or received according to law or ordinance or in the connection with the transaction of official business.

The records management of the Commission is under the direction of the Records Management Officer. The Information Technology Services Division and the Oil and Gas Division share responsibility for the management of records that relate to the RRC's UIC Program. The records management provides for:

- proper organization and maintenance of records;
- design and implementation of security required to protect confidential information;
- reconstruction of essential information in the event of a loss of record;
- implementation of a policy for the systematic retention, transfer, and disposition of records to comply with all operating and legal requirements;
- transfer of permanently valuable records to the Texas State Archives;
- efficient retrieval and photocopy services upon request in compliance with the Open Records Act and RRC policy; and
- reduction of record duplication.

The Administration Division's Central Records Department is responsible for maintaining file rooms in Austin, providing microfilming and electronic imaging support, and overseeing the Oil and Gas Division's records management program to ensure that the needs of the Division and the requirements of the state are met. The Central Records Department is managed by a Records Manager who also serves as the agency Records Management Officer as required by the Texas State Library.

In order to effectively implement the records management program throughout the agency, each division designates Records Coordinators who are responsible for coordinating the records management activities in their area, including conducting records inventories, maintaining an

updated record retention schedule, and coordinating the transfer of records to inactive storage or for microfilming or scanning. For the UIC Program, the UIC Quality Assurance Officer serves as the Records Coordinator.

The Railroad Commission's retention schedule is a timetable that identifies the length of time a records series must be retained in active and inactive storage before final disposition by destruction or archival preservation. The Commission's Records Retention Schedule was prepared using the Texas State Library's Records Retention Schedule as an authority and was approved August 25, 1998. The Records Retention Schedule has been divided into sections, on a division basis, to include those records that are unique within each division. The Commission must update and re-certify their records retention schedule with the Texas State Library and Archives Commission once every five years. Timely implementation of this retention schedule has reduced the amount of paper being maintained and allows easier access to historical documents that are now available on microfilm or the Commission's web site.

A summary of the retention and disposition of UIC forms follows:

- H-1: Application to Inject Fluid Into a Reservoir Productive of Oil or Gas (Active) - permanent record to be scanned and paper files sent to Texas State Archives for review.

- H-1: Denied - permanent record, unless it is decided not to retain permanently, then retain in hard copy for 1 year from denied date, scan and send paper files to Texas State Archives for review.

- H-1: Withdrawn - after file is closed, retain in hard copy for 2 years from date withdrawn and destroy hard copy.

- H-1A: Injection Well Data for H-1 Application (Active) - permanent record to be scanned and paper files sent to Texas State Archives for review.

- H-1A: Denied - permanent record, unless it is decided not to retain permanently, then retain in hard copy for 1 year from date denied, scan and send paper files to Texas State Archives for review.

- H-1A: Withdrawn - after file is closed, retain in hard copy for 2 years from date withdrawn and destroy hard copy.

- W-14: Application to Dispose of Oil & Gas Waste by Disposal into a Porous Formation Not Productive of Oil or Gas (Active) - permanent record scanned and paper files sent to Texas State Archives for review.

- W-14: Denied - permanent record, unless it is decided not to retain permanently, then retain in hard copy for 1 year from date denied, scan and send paper files to Texas State Archives for review.

- W-14: Withdrawn - retain in hard copy for 2 years from date withdrawn and destroy hard copy.

- W-14: Cancelled - permanent record scanned and paper files sent to Archives for review.

- H-2: Application to Create, Operate and Maintain a Brine Mining Facility - permanent record in hard copy form to be retained in Technical Permitting.

- H-4: Application to Create, Operate, and Maintain an Underground Hydrocarbon Storage Facility - permanent record in hard copy form to be retained in Technical Permitting.

- H-5: Disposal/Injection Well Pressure Test Report - Administrative Value, then keep for 5 years in hard copy, scan, then destroy hard copy.

- H-10: Annual Injection/Disposal Well Monitoring Report - hard copy is imaged and kept permanently; paper is destroyed.

- H-10H: Annual Well Monitoring Report for Underground Storage in Salt Formations - permanent record in hard copy form to be retained in Technical Permitting.

Preparation, Review, Approval, and Issuance of Documents:

The Injection/Disposal Well Permit Testing and Monitoring Seminar Manual is a technical guidance document which is available online on the RRC website (http://www.rrc.texas.gov). The document is updated by program managers and is reviewed by the Assistant Director for Technical Permitting.

The Quality Assurance Project Plan for Chemical Tests is prepared by the QA Project Officer and follows the guidance for the preparation of QA project plans now specified in the document entitled "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," EPA QA/R5. The Quality Assurance Project Plan is reviewed and approved by the Assistant Director for Technical Permitting and the Director of the Oil and Gas Division.

The RRC must comply with the requirements of the Texas Administrative Procedures Act (APA), which establishes the Texas Register as a statewide forum for public notice of any agency activity, such as rulemaking, open meetings, public hearings, and contracts. Rules adopted by the Secretary of State under the APA provide the document format for rules and other documents published in the Texas Register (www.sos.state.tx.us/texreg).

Title 4 of the Government Code, Chapter 441, establishes a Records Management and Preservation Advisory Committee whose charge is to recommend improvements to the state's system of records management biennially.

Compliance with Statutory Requirements:

The Records Management Officer is responsible for ensuring that agency records activities comply with appropriate state and federal requirements. These responsibilities include determining that all agency records are on an approved record retention schedule, ensuring that the specified retention periods comply with state and federal record retention periods, and ensuring that all microfilming and electronic imaging complies with the applicable national standards for quality control and record preservation.

In addition, Title 4 of the Government Code, Chapter 441, requires a state auditor to include in an audit report of a state agency the degree to which an agency has complied with record disposal instructions and transfer agreements.

6. COMPUTER HARDWARE AND SOFTWARE

Computer Hardware

The current Information Technology environment at the Railroad Commission of Texas (RRC) includes both an IBM mainframe and a Windows/Unix-based server environment along with 800 networked desktops, laptops and printers. Inspectors in the field use specially equipped mobile devices (Toughbooks) to connect to the Commission's servers through a virtual private network (VPN). A new Inspections application, with much greater ease of use, was deployed in the summer of 2015. The Commission's IBM Mainframe houses the core agency applications and databases. The server applications and databases are integrated with core applications running on mainframe. The server applications allow online filing of required production and monitoring data via the web. Agency file and print services are available via Microsoft Windows servers and Microsoft Exchange/Outlook email is provided via cloud services. The UIC program utilizes both the online reporting of monitoring data and integration with the exploration and production well databases on the mainframe to allow thorough correlation between these interrelated activities.

The RRC participates in the Data Center Services (DCS) contract with the Department of Information Resources (DIR). This contract provides the RRC with data center services and includes the consolidation and replacement of mainframe and server hardware with updated equipment at the State Data Centers. RRC server infrastructure consolidation began in 2013 and was largely complete in June of 2014. Existing server hardware was transformed to newer equipment at the State Data Centers in Austin and San Angelo, Texas. Remaining server consolidation involves GIS, reporting, and applications built using Oracle Forms and JDeveloper development environments. GIS and reporting server consolidation began under an IT Modernization effort in the summer of 2015 and is continuing as of June 2016.

Software

Custom software at the RRC is developed by software developers on the Information Technology Services (ITS) staff. The ITS system development methodology is used to build new software applications or for software enhancements. The methodology provides the required quality assurance steps during the software development lifecycle. Software architectural standards for all new application development as part of IT Modernization efforts are being proposed, evaluated, and approved within ITS to drive higher productivity, ease of maintenance, and reusable components among other benefits. When new software is needed, the RRC division program area submits a request for the software to be written and/or modified. The request outlines the requirements for the new software. Once approved and prioritized by the RRC Information Technology Steering Committee (ITSC), the ITS staff assigned to the project will meet with internal program area staff to

determine detailed requirements. After development is completed, the software is tested before being released to the requester. User Acceptance Testing (UAT) is required and conducted prior to software release. During UAT, the requesting division tests the Application for errors and expected function. This testing begins with the division's requesting staff and then proceeds to full parallel testing with all appropriate division staff. Errors are corrected and design changes are made and tested before the software goes live.

Where appropriate to best meet RRC division business process needs, commercial off the shelf (COTS) software is evaluated by ITS staff familiar with the software type and its intended use. The evaluation team also includes appropriate department personnel. The evaluation team prepares a written report of the review, including: general suitability of the software; major strengths and weaknesses of the software; cost effectiveness of the software relative to other alternatives; and a recommendation whether or not the software should be purchased. This recommendation is presented to the ITSC for approval.

The various collection and information processing activities of the data systems contain extensive data error checking procedures. Online filing by the Operators is encouraged. Currently about 95% of H-10 reporting is done online. Online entry of Groundwater and Rule 13 Exception forms were made available in March of 2015. The data collection for hardcopy filings is outsourced to a vendor that provides data indexing and imaging. The H-10 Well Monitoring hardcopy filings are indexed and the images for these filings are available through the on-line application.

The ITS Division is also responsible for developing the electronic imaging standards for the electronic transfer of data to the RRC from electronic data interchange (EDI) file submitters. EDI file upload allows operators to submit thousands of filings in one session. Electronic filing may be accomplished by using the RRC Online application available through the Internet. To help facilitate easier EDI file creation and uploads, ITS has updated the help documentation and guides for agency staff to assist filers.

7. PLANNING

Needs of Customers:

The people of Texas are the most important customers of the RRC's UIC program for Class II injection wells. It is the people of Texas to whom the Railroad Commissioners must answer either directly or through their representatives. The expectations of those customers are understandably high. EPA's expectations with regard to oversight of the UIC program must also be met. And to a great degree, Technical Permitting and the Oil and Gas Division are their own customers as they use statistics, reports, and other information in support of the agency's strategic goals.

The RRC's Agency Strategic Plan states as an essential goal the following: To conserve and protect our state's natural resources (air, water, land, wildlife, and mineral resources) by providing leadership and policy guidance for state, federal, and local initiatives and by encouraging responsible, sustainable economic development.

Under this goal, the Plan lists as a strategy, administrating a federally approved and funded UIC program. Outputs under this strategy that are applicable to the UIC program are:

- Number of oil and gas facility inspections performed.
- Number of oil and gas environmental permit applications and reports processed.

These outputs are tracked by specific performance measures.

The EPA's Agency Operating Guidance outlines the direction and strategic priorities for the EPA's programs each fiscal year. EPA's Operating Guidance for the Office of Drinking Water, and more specifically for the UIC program, provides the RRC important guidance on the environmental priorities from the national perspective.

The EPA's biannual reporting requirements for the UIC program measure the performance of the program through numerous work outputs reported on EPA Forms 7520. The statistical information is the same or very similar to that required as outputs in the Agency Strategic Plan.

The Oil and Gas Division and Technical Permitting are customers for their own data. The data is used to evaluate staffing needs and individual job performance, and to ensure the timely completion of tasks.

Expectations of Customers:

All customers want their individual needs to be met, and they expect the information and the statistics that they receive to be accurate and credible.

Citizens and the regulated community expect to be treated with fairness and impartiality, and they expect decisions to be made based on factual findings. The citizen wants no less than full compliance with UIC rules. The citizen expects a strong field presence to ensure that any violations that may adversely affect the environment are discovered and that timely and appropriate enforcement actions are taken. The citizen expects that whenever he or she observes or alleges that the environment has been adversely affected, the agency's response will be immediate and its investigation will be complete and accurate.

Information reported to EPA on Forms 7520 to meet the needs of the Agency Operating Guidance is expected to be provided in a timely and accurate manner. Record keeping, reporting and compilation methods have been established to ensure complete and accurate data is available to meet EPA needs.

The RRC expects to attain its goals and objectives as documented in the Agency Strategic Plan. These expectations are described in the following objective outcomes and outputs:

- Percentage of oil and gas facility inspections that identify environmental violations.

- Number of enforcement referrals for legal action due to oil and gas rule violations.

The RRC's UIC staff handles each program element individually with its own expectations and goals. Methods are in place to ensure that the technical and quality objectives of the tasks within the program element are met. Such methods include tiered reviews, time frames, automated application tracking, computer-generated notices and reporting forms, and standard operating procedures.

The RRC has an approved quality assurance project plan (QAPP) for chemical tests. The plan covers the chemical analyses of samples collected in support of inspections and complaint investigations related to the UIC program. The QAPP for chemical tests also includes a guidance document for field inspectors on performing hydrogeologic investigations. The QAPP for chemical tests ensures that the expectations of all customers for such data are met.

The majority of samples collected are water samples and are analyzed for dissolved mineral constituents. Depending on the nature of the investigation, hydrocarbons may be collected. Personnel are trained to use all necessary precautions in sampling and handling hydrocarbon-contaminated media. District office personnel receive training and certification with regard to hydrogen sulfide gas. Hydrogen sulfide is commonly associated with produced hydrocarbons and may occur with produced hydrocarbons or accumulate in tanks and equipment, including sampling points, at lethal concentrations.

Attainment of Results:

In order to attain the results necessary to meet customer needs and expectations, a program must have proper procedures, standards, expertise, training, and continuing professional development. In addition, a continuing effort to improve the effectiveness and efficiency of the program must exist. These conditions exist within the RRC's UIC Program.

The RRC conducts Training Seminars and Workshops annually to educate the regulated community and others who are interested on the rules and programs for water protection. UIC is a major component of the Training Seminars and Workshop discussions. The primary purpose of the Training Seminars and Workshops are to promote the understanding of the rules and, therefore, produce an improved result. A manual, Injection/Disposal Well Permit Testing and Monitoring Seminar, is available online on the RRC website (http://www.rrc.texas.gov).

To meet the needs of annual injection well reporting, filings can be entered online through a web-based computer system or via an Electronic Data Interchange (EDI) submission.

In the conduct of field operations, the immediate response to complaints is given the highest priority, other than emergency situations. This priority status ensures that expectations of citizens are translated into the desired result.

Cost and Schedule Constraints:

Cost and schedule constraints are always a factor to overcome in the RRC's UIC Program. An annual UIC workplan with attainable results is drafted. However, adjustments must be made due to shifting priorities within the Oil and Gas Division and due to unforeseen EPA changes and demands.

Acceptance Criteria for Customer Satisfaction:

The citizens of Texas are our most demanding customers. They demand no less than the total success of the program because their environment is at stake. Underground injection is not a method that is easily understood by the general public. However, the public does understand the importance of their water sources and their satisfaction with our investigation of complaints is a key measure of success.

It is the responsibility of the management to identify problem areas and shortfalls. Feedback from citizens, the regulated community, other state and federal agencies, and the staff helps the management fine tune the work tasks and improve the performance measures. Because the focus of the UIC program is pollution prevention, the effective measurement of results is difficult. The ultimate measure of success or failure is the number of documented cases of groundwater contamination, which is very minimal.

The EPA, as a customer, evaluates the specific performance measures of the UIC program. EPA must be satisfied that the RRC's UIC workplan commitments have been met. EPA's degree of satisfaction is formalized in its mid-year and end-of-year evaluation reports. EPA must also be satisfied with the completeness and accuracy of the quarterly statistical reports.

8. IMPLEMENTATION OF WORK PROCESSES

Work Processes:

Work tasks are delineated in accordance with the elements of the UIC program, namely:

- Monitoring and Assessment of Injection Facilities
- Plan Review and Permit Processing
- Administration and Program Development
- Training and Technical Assistance
- Enforcement and Surveillance
- Public Participation
- Data Management

These work tasks and their individual components are addressed in the annual workplan. It is the responsibility of the Director for the Oil and Gas Division, who directly supervises the line managers, to ensure that the work is performed according to the workplan with the assistance of the Quality Assurance Officer. Managers are responsible for accomplishing the tasks within their areas. This includes organizing and planning activities to meet quality requirements consistently, coordinating work performance for specific projects, training and qualifying personnel to achieve and maintain efficiency, and conducting employee performance evaluations. Job descriptions of individual employees are descriptive of the routine and standard tasks within each program element.

Appropriate Procedures:

The RRC has definite procedures in place to accomplish a variety of tasks such as reviewing permit applications, reviewing mechanical integrity reports, reviewing annual monitoring reports, reviewing completion reports, and inspecting disposal and injection wells. The level of detail in the documentation of these procedures varies according to the complicacy or simplicity of the task. Examples of written procedures that have been developed for two tasks are: (1) checklists for the administrative and technical reviewers of injection well permit applications; and (2) district office forms for the inspection of oil and gas properties. The checklists are used informally to be sure that every item has been checked and that no review steps have been missed. The inspection forms detail the reason for the inspection, the findings, and the resulting actions.

The inspection forms are reviewed by the inspector's supervisor and statistical data is computer processed.

Development and Review of Procedures:

Procedures for routine and standardized tasks are identified and prepared by managers. The review and approval of procedures is at the assistant director level. Procedures for special and new projects are developed by directors with participation managers. Procedures are reviewed for changes whenever results are or are perceived to be unacceptable by either customers or staff who use the procedures.

Supervision Over Procedures:

The level of supervision is commensurate with the importance or the developmental stage of a project. Depending on the type of project a combination of technical, legal, and administrative supervision may be necessary.

Quality Assurance Project Plan:

The EPA has identified one environmental measurement of the UIC program that requires a quality assurance project plan (QAPP). A QAPP is required for chemical tests. The RRC's UIC program has an approved QAPP for chemical tests, which was implemented in 1988, and is updated annually.

9. ASSESSMENT AND RESPONSE

Agency Strategic Plan:

The RRC uses an ongoing strategic planning process. Ongoing assessment is the vital element in the strategic plan. The assessment is both external and internal and addresses economic, political, technological, demographic, and social factors. The external/internal assessment includes identification of the agency's strengths, the agency's weaknesses, conditions that create opportunities for the agency, and conditions that create impediments to the successful attainment of the agency's mission. The external/internal assessment identifies specific need indicators and addresses the major issues affecting the Oil and Gas Division during the time frame of the strategic plan. The assessment is used during each stage of the strategic planning process and is an ongoing tool for analyzing what the division has accomplished in the past and its needs for meeting future goals.

Internal assessment consists not only of the numerical assessment of strategic outputs and objective outcomes as described in Section 7, Planning, but includes an analysis of the following types of questions:

1. Are we meeting our customers' needs? If not, how can we improve? If we have failed, what were the reasons?

2. Do our programs support each other? Where is further coordination needed? What programs need strengthening for us to reach our objectives?

3. What programs or activities are expected to need more emphasis? What programs or activities are expected to grow or decline? How do we plan to accommodate such changes?

The external assessment will include questions of the following types:

1. Are agency resources being effectively utilized to meet objectives and goals? Where can improvements be made?

2. Where should the agency's efforts be focused in the area of environmental protection?

3. How well do the agency's programs balance environmental protection and economic vitality?

U. S. EPA Performance Review:

An important assessment component is the performance review policy that is ingrained in the U. S. EPA federal assistance program. The policy provides a framework within which EPA and the RRC can clarify performance expectations and solve problems through a system of negotiation according to national standards and demonstration of equal effectiveness in the case of Class II injection well programs.

Clear expectations of the UIC program are imperative. Annual assistance agreements set the foundation for performance expectations. Annual workshops specify the outputs that the program will produce and the allocation of resources and milestones to complete the outputs. The outputs are numerically measurable, are intended to be realistically ambitious, but are impacted by uncontrollable external factors, particularly in the unpredictable oil and gas production industry.

The formal assessment of the agency's performance under assistance agreements occurs as part of the EPA's comprehensive review and evaluation. The process is governed by the EPA's Policy on Oversight of Delegated Programs, which states that evaluations should focus on overall program performance, rather than on individual actions, and should be based on objective measures and standards agreed to in advance. The EPA acknowledges accomplishments, and when oversight discovers a performance deficiency, appropriate corrective steps are taken. The RRC's UIC program performance is assessed by EPA's UIC program manager. The assessment is documented in mid-year and end-of-year evaluations.

External Audits:

Unscheduled audits of the RRC's UIC program have been performed by the Federal General Accountability Office (GAO). The GAO audits could be classified as technical independent assessments. Their focus is on the performance of the technical elements of the program and includes both qualitative and quantitative evaluations.

GAO audits are performed with an external perspective by persons who are not necessarily experienced or trained in the activity of oil and gas production and underground injection related to oil and gas production, and, therefore, represent a challenging opportunity to the agency to explain how the program is meeting the intents and requirements of the Safe Drinking Water Act. The most recent performance audit occurred between December 2012 and May 2013 as part of GAO's review of EPA's management of UIC programs.

The State Auditor's Office performs audits of agency activities as mandated by legislation or executive order. In 1994 the State Auditor's Office conducted an audit of the RRC's permitting activities, which included the UIC permit program. The focus of the audit was on the efficiency of application and permit processes and was oriented toward meeting the needs of the applicant as a customer.

Peer Reviews:

The RRC's UIC program was reviewed in 1988 by peers under the UIC peer review program coordinated by the Ground Water Protection Council (GWPC), formerly the Underground Injection Practices Council (UIPC), with the support of the U. S. EPA and the U. S. Department of Energy. The review was performed by managers of UIC programs in two other states. Basic questions pertinent to the review were:

(1) Does the state protect underground sources of drinking water?
(2) Is the state UIC program up to date technically?
(3) Does the state program meet all federal requirements?
(4) Is the staff well-qualified and given adequate resources and training to do the job?

The answers to these questions and a complete description of the program were provided in a report published in 1989. The review identified program strengths and areas in need of improvement. The report also acknowledged where improvements or weaknesses were impacted by resource shortfalls.

In response to the peer review, the program managers focused their attention on areas that were identified as in need of improvement. As a side benefit, by participating in the reviews of three other states' programs, UIC management discovered methods and procedures that could be implemented to improve the RRC's UIC program.

Data Quality Assessments:

Periodic assessments of the quality of the data generated by the UIC program are performed. These assessments involve the use of computer programs that are designed to generate information for management's use in identifying quality problems, evaluating the quality of performed tasks, and providing documentation for suspected problems. These types of data quality assessments are applied to: (1) evaluating the processing time for injection well permit applications; (2) evaluating the progress in completing external mechanical integrity reviews; (3) identifying and correcting data entry errors; (4) planning and scheduling work priorities; and (5) ensuring the completeness of lists of information.

Whenever data quality has been adversely impacted, the manager is responsible for the appropriate corrective action, which may include proposing procedural changes and retraining personnel. The Director has the authority to suspend work in progress, approve procedural changes, and reset work priorities.

Periodic assessments of the quality of field inspection activities are performed on an unscheduled or random basis. The following types of assessments may be performed by the inspector's supervisor or the district director: (1) review of inspection reports; (2) retracing inspections performed; and (3) shifting of duties or territories. The district director is responsible for taking corrective action.

10. QUALITY IMPROVEMENT

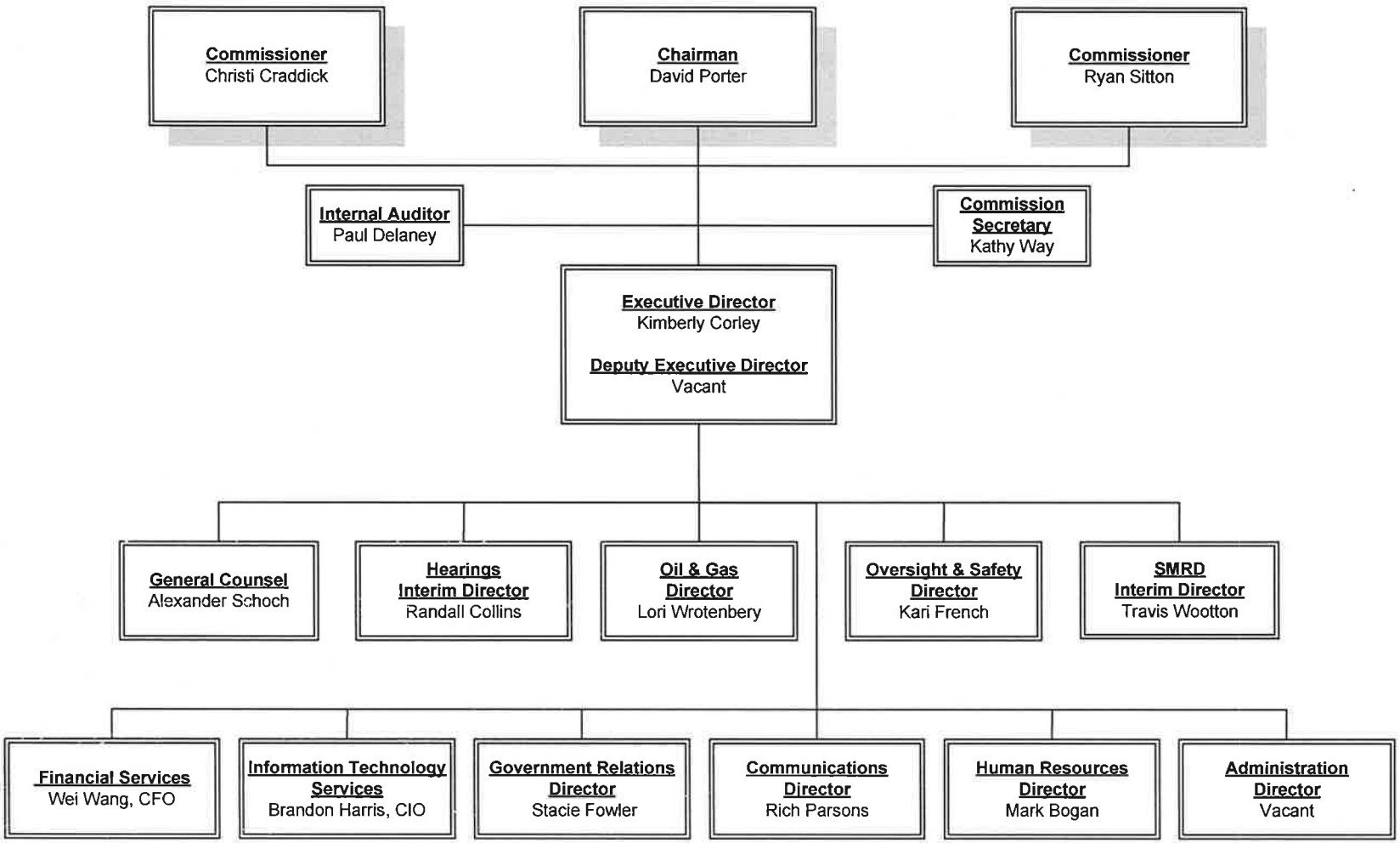
Management System:

The Quality Assurance Officer is responsible for the quality of environmental measurements, although it is the responsibility of each employee to notify the QA Officer whenever the quality of environmental data has been adversely affected or is in doubt. In turn, it is the QA Officer's responsibility to investigate the concern and plan the appropriate corrective action. As mentioned previously, for the UIC program, a QA project plan is required only for chemical tests.

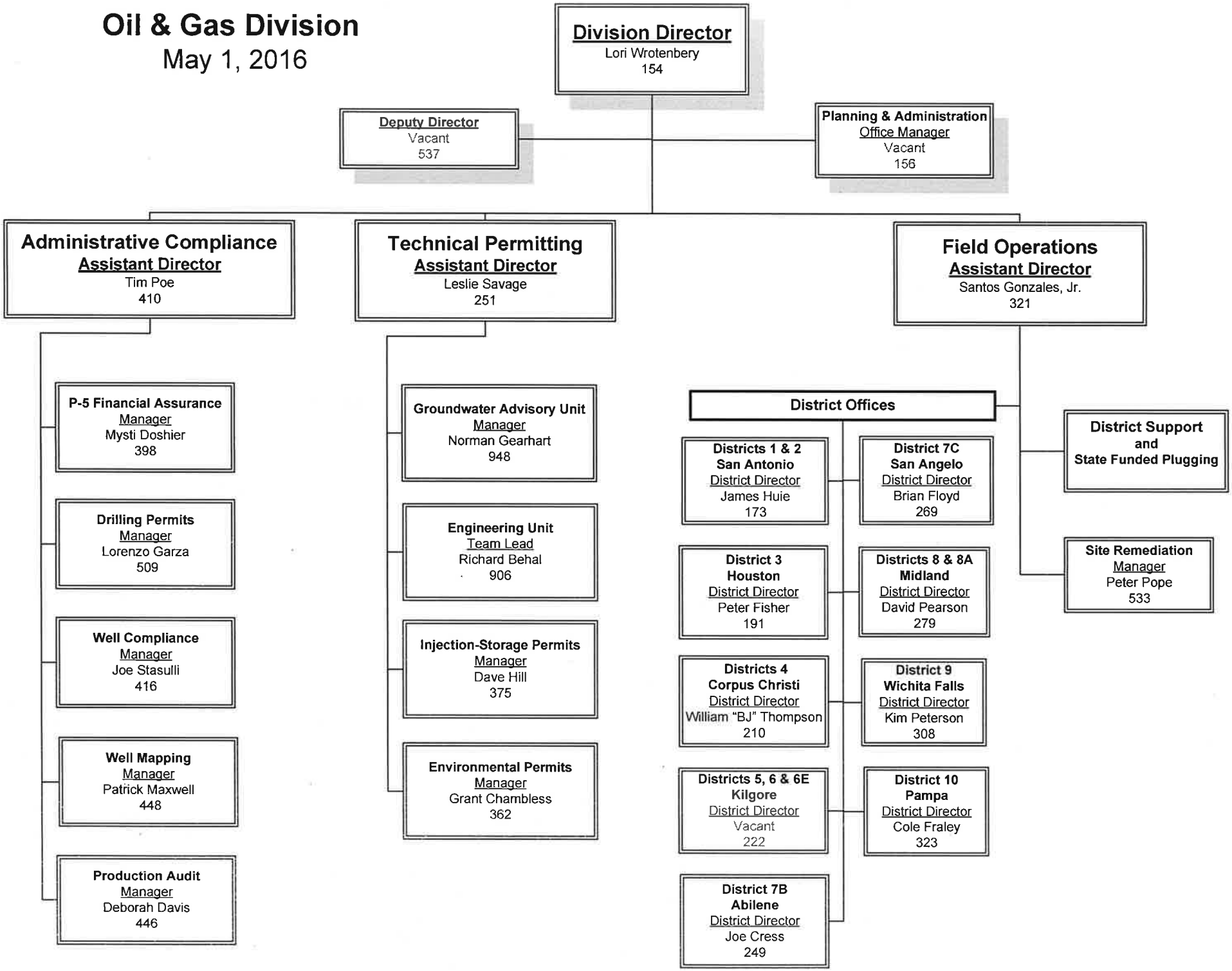
In reality, each employee is responsible for the quality of his or her own tasks. This work quality is evaluated by the employee's supervisor as a part of the employee's performance evaluation. Whenever the quality of a task does not meet requirements, the supervisor will require improvement.

As described in Section 2, Quality System and Description, the RRC ascribes to a total quality management approach. This team approach encourages the self-reporting of quality control problems and the self-motivation to seek improvement. Ingrained in the team approach is the no-fault concept that the quality of the overall program is of the utmost importance. Oil and Gas Division employees understand the importance of their tasks and approach their jobs with pride and responsibility.

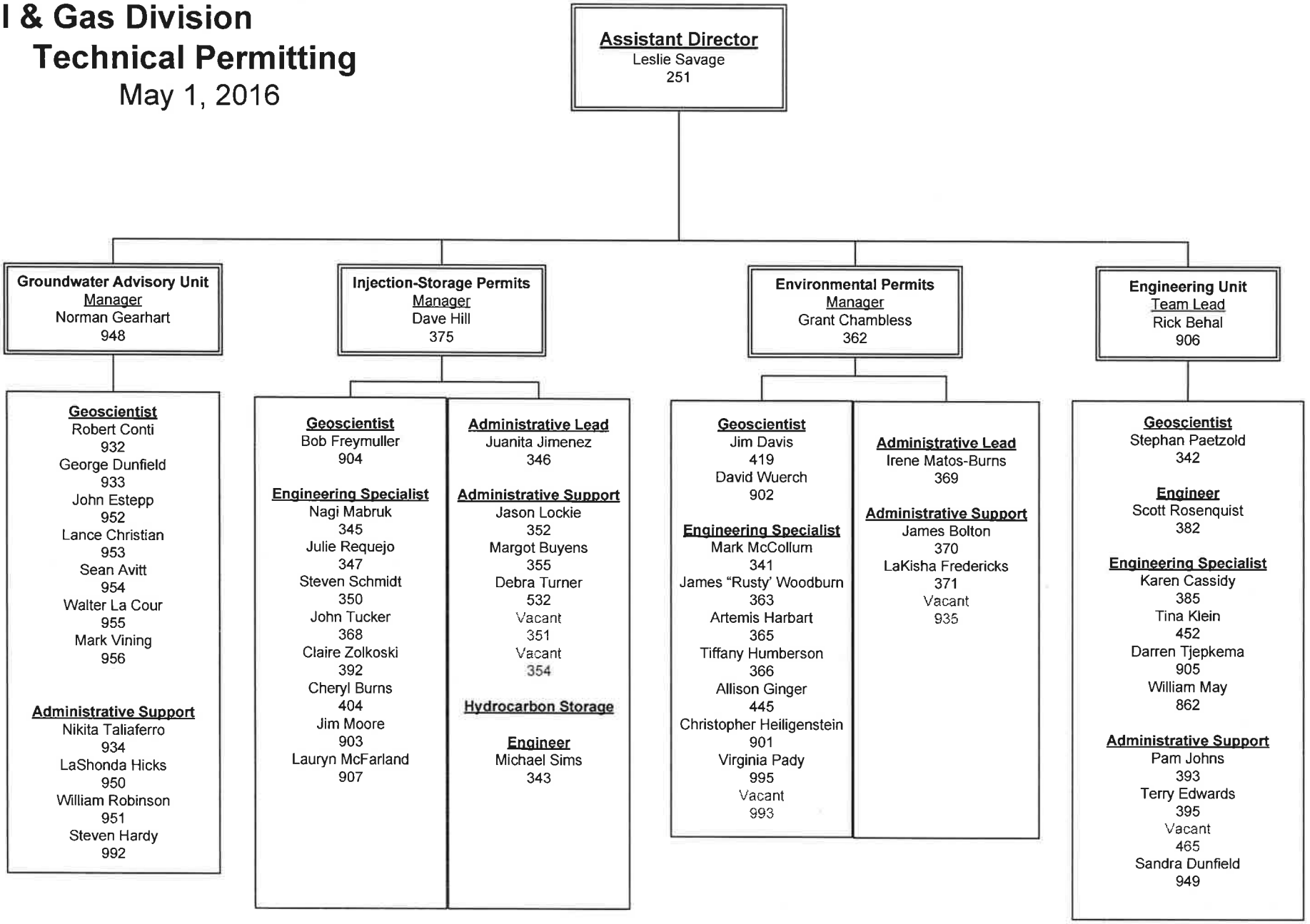
The Railroad Commission of Texas – Overview
May 1, 2016



Oil & Gas Division
May 1, 2016



Oil & Gas Division
Technical Permitting
May 1, 2016



Quality Management Plan
For the
Railroad Commission of Texas
Oil and Gas Division
Underground Injection Control Program

Director
Oil and Gas Division

Lori Wrotenbery

Lori Wrotenbery

Date: 6-7-16

APPROVAL:

Quality Assurance Manager
EPA Region VI

_____
Donald L. Johnson

Date: _____

Quality Management Plan
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